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cont.

19. A control and motor arrangement, according to claim 18, wherein the control arrangement is configured and arranged to adjust an amount of power supplied to the motor in response to changes in the information received from the transducer.

5 20. A control and motor arrangement, according to claim 18, wherein the information received from the transducer is provided to a sound control arrangement.

10 21. A control and motor arrangement, according to claim 20, wherein the sound control arrangement is configured and arranged to select a sound effect for playing as a function of the information received from the transducer.

 22. A control and motor arrangement, according to claim 18, wherein the control arrangement is configured and arranged to simulate effects relative to inertia.

15 23. A control and motor arrangement, according to claim 22, wherein the control arrangement is configured and arranged to, in response to power being removed from the model train, supply power to the motor from an alternate power source.

 24. A control and motor arrangement, according to claim 23, wherein the alternate power source comprises a battery arrangement.

20 25. A control and motor arrangement, according to claim 22, wherein the control arrangement is configured and arranged to, in response to a train start command, gradually supply power to the motor.

26. A control and motor arrangement for use in a model toy train comprising:

a motor, configured and arranged to generate a locomotive force for propelling the model train;

a transducer coupled to the motor and operative in producing a signal characteristic of rotational speed of the motor;

a control arrangement operative to detect an available track voltage and coupled to receive the rotational speed information from the transducer, the controller being configured and arranged to apply a percentage of the available track voltage to the motor and apply a greater percentage of available track voltage to the motor in response to a signal from the transducer characteristic of a decrease in the rotational speed of the motor.

27. A control and motor arrangement as in claim 26 wherein the controller is configured to set a desired speed in response to a horn signal made simultaneously with an increase in track voltage.

28. For use in a model train, a control and motor arrangement, comprising:

a motor, configured and arranged to generate a locomotive force for propelling the model train;

a power arrangement, coupled to a model railroad track used by the model train and configured and arranged to supply power to the control and motor arrangement;

a radio control interface, configured to receive commands from a radio controller unit;

a process control arrangement, coupled to receive speed information regarding the rotational velocity of the motor and configured and arranged to generate a plurality of motor control signals based upon a combination of a plurality of speed feedback control signals and pulse width modulation signal;

a motor control arrangement, responsive to the motor control signals and